

These changes are being made to claim priority of a previously filed international application, to bring the application into better conformance with U.S. practice, and to further define what the Applicants regard as the invention. No new matter is being introduced. The entrance of this amendment is respectfully requested. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

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Dated:

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10/9/01

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IN THE SPECIFICATION:

Page 1, line 11, please amend the sentence to read The invention relates to a miniaturized circuit housing [according to the precharacterizing clause of Claim 1] for encapsulating and providing external contacts for integrated circuits and, in particular, a housing with a housing floor and an oppositely disposed housing lid which presses a circuit contact element positioned therebetween resiliently against the upper surface of the housing floor.

Page 3, line 31, please insert –Summary of the Invention--.

Page 9, between lines 22 and 23, please insert –Detailed Description of the Preferred Embodiments--.

Please cancel Claim 19 without prejudice.

1. (Amended) A miniaturized circuit housing to encapsulate and provide external contacts for at least one integrated circuit having circuit contact elements on a lower surface [, in particular of the flip-chip or wafer-level-package type, with] , the circuit housing comprising:

a housing floor[, comprising [the] a lower surface [of] which [bears] includes housing contact elements for making external contact and [the] an upper surface [of] which is electrically connected to the circuit contact elements on the lower surface of the circuit[, characterized in that]; and

a housing lid [is provided, in particular] opposite the housing floor[, which presses] so as to press the circuit with the circuit contact elements resiliently against the upper surface of the housing floor with no permanent connection between the

[illegible]

11. (Amended) The circuit housing [according to] of Claim [1] 6,
[characterized in that] wherein the lid of the housing is rigidly constructed and joined to the

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wall [or is shielded by a rigid covering, in such a way that externally applied force is not transmitted to the circuit].

12. (Amended) The circuit housing [according to] of Claim 1, [characterized in that] wherein the lid of the housing is constructed as a heat sink comprising area-increasing structures in order to cool the circuit [, in particular bears cooling ribs or similar area-increasing structures].

13. (Amended) The circuit housing [according to] of Claim [1] 2, [characterized by a construction of the housing lid and/or the spring element or elements] wherein the ductility and shapes of the housing lid and the at least one spring element is selected such that the pressing force exerted by [these components] the housing lid and the at least one spring element between the circuit and the housing floor [is adjusted to suit the material of which the circuit contacts are made, in particular regarding their flow behavior and shape, in order to] is such as to maintain [a permanently good] electrical contact between the circuit contact elements and the housing floor.

14. (Amended) The circuit housing [according to] of Claim 1, [characterized in that] wherein the housing contact elements [have substantially the shape of a sphere or a section of a sphere, like solder balls] are at least partially spherical.

15. (Amended) The circuit housing [according to] of Claim 1, [characterized in that] wherein the housing contact elements are constructed substantially as contact pins or flat contact surfaces.

16. (Amended) The circuit housing [according to] of Claim 1, [characterized in that] wherein the housing floor is constructed as at least a section of a circuit board [or a section thereof].

17. (Amended) The circuit housing [according to] of Claim 1, [characterized in that] wherein the upper surface of the housing floor [, to make internal contact with the circuit contact elements, there are] is provided with inner housing contact surfaces configured as flat elevations so as to make internal contact with the circuit contact elements.

18. (Amended) The circuit housing [according to] of Claim 17, [characterized in that] wherein the inner housing contact surfaces [are made substantially of] comprise gold [or a gold alloy and in particular] and are formed by the stamping of bumps.

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